

FIREBREAK

(Feet)
Code 394

Natural Resources Conservation Service
Conservation Practice Standard

I. Definition

A strip of bare land or vegetation that retards fire.

II. Purposes

This practice may be applied as part of a conservation management system to support one or more of the following purposes:

- To prevent the spread of wildfire.
- To control prescribed burns.

III. Conditions Where Practice Applies

This practice applies to all land uses where protection from wildfire is needed or prescribed burning is applied.

IV. Federal, State, and Local Laws

Users of this standard shall comply with applicable federal, state and local laws, rules, regulations or permit requirements governing **firebreaks**. This standard does not contain the text of federal, state, or local laws.

V. Criteria

Firebreaks may be temporary or permanent and shall consist of fire-resistant vegetation, non-flammable materials, bare ground, or a combination of these.

Firebreaks will be of sufficient width and length to contain the expected fire.

Firebreaks shall be located to minimize risk to the resources being protected, including locating on the contour where practicable to minimize risk of soil erosion.

Plant species selected for vegetated firebreaks will be noninvasive, comprised of attributes making them capable of retarding fire, and easy to maintain.

Erosion control measures shall prevent sediment from leaving the site where bare ground firebreaks are established

VI. Considerations

A. General

Use barriers such as streams, lakes, ponds, rock cliffs, roads, field borders, skidtrails, landings, drainage canals, railroads, utility right-of-ways, cultivated land, or other areas as existing firebreaks.

Attempt to locate firebreaks near ridge crests and valley bottoms. If winds are predictable, firebreaks should be located perpendicular to the wind and on the windward side of the area to be protected.

Consider the selection of plant species for vegetative firebreaks that will enhance the needs of wildlife in the area.

Design and layout should include multiple uses.

Consider cultural resources and environmental concerns such as threatened and endangered species of plants and animals, natural areas, and wetlands.

Most firebreaks will consist of short grass such as Kentucky Blue Grass or Creeping Red Fescue that is mowed periodically to keep out unwanted brush. See NRCS Field Office Technical Guide (FOTG), Section IV Standard 342, Critical Area Planting, for seeding rates and establishment recommendations.

Bare soil firebreaks should only be used where an erosion hazard does not exist.

B. Firebreaks for Tree Plantations

The primary firebreak will be around the perimeter of the planted area. It should consist of a grassy strip at least 14 feet wide which can also serve as a

road, and a bare soil strip adjacent to the trees at least 14 feet wide.

Within the plantation, secondary firebreaks should be located at intervals of 300 feet or less. These firebreaks should be at least 18 feet wide and will normally be used as access roads and should generally follow the contour to avoid erosion.

Firebreaks established between the plantation and buildings should be at least 100 feet wide.

C. Firebreaks for Grasslands and Other Areas.

Prescribed burning may be a management technique in and around areas of wetlands managed for wildlife, natural areas of prairie vegetation, and the like. Control of the prescribed burn will typically require firebreaks.

1. A perimeter firebreak is usually adequate to confine fire to the intended area.
2. In very large areas, secondary breaks within the area may be necessary to limit size and intensity of burn. Design will be governed by size of area, topography and flammability of fuels. See NRCS FOTG Standard 338, Prescribed Burn, for details.
3. A minimum firebreak of 50 ft. should be used to protect buildings or other high value areas. This will include a 14 ft. bare strip adjacent to the area to be burned. Firebreaks of 10-15 ft. can otherwise be used.
4. Burned firebreaks, using backfiring techniques during prescribed burns, should have a minimum width of 100 feet for tall grasses and 200 feet for tall grasses with woody species.
5. Laying down water lines, and/or use of fire retardants such as liquid ammonium polyphosphate, should be used in conjunction with firebreaks.

D. Construction of Firebreaks

Stumps, logs, large stones, and other debris will be removed from soil surface prior to soil preparation.

Firebreaks to be maintained in a bare soil condition will be worked up to expose bare soil. Bare firebreaks will not be used if a significant erosion

hazard exists if such firebreaks run up and down hill.

Legumes may be seeded with the grasses to improve wildlife habitat value. Proportion of legumes to grasses will be held to a minimum to prevent a buildup of fuel on the surface.

VII. Plans and Specifications

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan and the burn plan, or other acceptable documentation.

VIII. Operation and Maintenance

Mow or graze vegetative firebreaks to avoid a build-up of excess litter and to control weeds.

Inspect all firebreaks for woody materials such as dead limbs or blown down trees and remove them from the firebreak.

Inspect firebreaks annually and rework bare ground firebreaks as necessary to keep them clear of flammable vegetation.

Repair erosion control measures as necessary to ensure proper function.

Access by vehicles or people will be controlled to prevent damage to the firebreak.

Bare ground firebreaks, which are no longer needed, will be stabilized.

IX. References

USDA, NRCS Wisconsin Field Office Technical Guide (FOTG), Section IV, Practice Standards and Specifications.